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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,535	06/29/2000	Shenheng Guan	98-13DIV1	8642

321 7590 07/31/2003

SENNIGER POWERS LEAVITT AND ROEDEL
ONE METROPOLITAN SQUARE
16TH FLOOR
ST LOUIS, MO 63102

EXAMINER

HANDY, DWAYNE K

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/607,535

Applicant(s)

GUAN ET AL.

Examiner

Dwayne K Handy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-70, 72 and 82-104 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 65-70 is/are allowed.
- 6) ☒ Claim(s) 61-64, 72 and 82-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 61-64, 72, 82-85 and 90-104 are rejected under 35 U.S.C. 102(a) as being anticipated by Windhab et al. (WO 98/07026). This rejection was made in the previous Office Action (paper no. 13) and remains in effect. See Response to Arguments below.

Inventorship

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 86-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Windhab et al. (WO 98/07026). This rejection was also made in a previous Office Action (paper no. 13) and remains in effect.

Response to Arguments

6. Applicant's amendment/arguments filed 5/16/03, with respect to claims 65-70 have been fully considered and are persuasive. The rejection of claims 65-70 involving the reference "Milberger" has been withdrawn. Milberger does not teach at least two

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different catalysts being contacted with one or more reactants in at least two reactions vessels into which *the reactants are fed simultaneously*.

As for the rejections that remain in effect from the previous Office Action, the arguments filed 5/16/03 have been fully considered but they are not persuasive. In traversing the rejection made by the previous Examiner under the reference "Windhab", applicant has argued that the reference does not anticipate the rejected claims since the flow restrictor of Windhab does not provide a greater flow resistance than the catalyst bed. This appears to be a spurious argument based on the claim as currently written. The claim as written merely recites "flowing the test fluid through.... flow restrictors". This is what Windhab shows. While it may be the case that applicant intends for their device to contain flow restrictors designed to exert a greater resistance to flow along the flow path than the catalyst bed (as argued by applicant – page 13), this feature is not in the claims. The Examiner recognizes his duty to read the claims in light of the specification, but also recognizes his duty to read the claims as broadly as possible. Also, on page 12, lines 3-4 states that the restrictors can be "**any passive structure that hinders fluid flow** including capillary tubes and micromachined channels". The Examiner believes the reference provides this feature. As such, the rejection of the claims based on the reference "Windhab" remains.

Allowable Subject Matter

7. Claims 65-70 are allowed.

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8. The following is a statement of reasons for the indication of allowable subject matter. In claim 65, applicant has recited a method for screening catalysts comprised of the following steps: feeding one or more reactants through one or more distribution valves to six or more reactant vessels with an inlet and outlet in communication with an entrance and exit control volume respectively and each reactor containing a different catalyst candidate, wherein the one or more reactants are fed simultaneously to at least two of the vessels and the one or more distribution valves providing selective fluid communication between the entrance control volume and the reactor vessels; contacting the six or more different catalysts with at least two different candidate catalysts are contacted simultaneously; discharging the reaction products and unreacted reactants from the reaction vessels and through one or more selection valves and to a detector; controlling the contact time to be about the same for each of the catalyst candidates; and detecting resulting reaction products or unreacted reactants to determine the efficacy of the catalyst catalysts . The Examiner considers the reference "Milberger" to be the closest prior art.

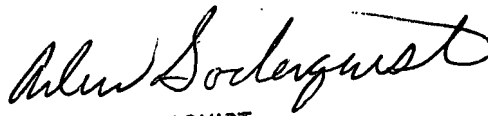
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K Handy whose telephone number is (703)-305-0211. The examiner can normally be reached on M-F 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (703)-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9310 for regular communications and (703)-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.


ARLEN SODERQUIST
PRIMARY EXAMINER

dkh
July 28, 2003